[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-0395; Directorate Identifier 2017-CE-011-AD]

RIN 2120-AA64

Airworthiness Directives; British Aerospace Regional Aircraft Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for British Aerospace Regional Aircraft Model HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201 airplanes that would supersede AD 97-10-05. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cracks in the main landing gear (MLG) fitting at the pintle to cylinder interface, which could cause failure of the MLG during takeoff and landing. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For the British Aerospace Jetstream Series 3100 and 3200 service information identified in this proposed AD, contact BAE Systems (Operations) Ltd, Business Support Team-Technical Publications, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; phone: +44 1292 675207; fax: +44 1292 675704; email: RApublications@baesystems.com; Internet: https://www.regional-services.com/spares_and_support/support/aircraft-technical-publications/. For the Heroux Devtek service information identified in this proposed AD, contact Heroux Devtek Product Support, Unit 1, Pembroke Court, Chancellor Road, Manor Park, Runcorn, Cheshire, WA7 1TG, England; phone: +44 01928 530530; fax: +44 01928 579454; email: technical_support@herouxdevtek.com; Internet: http://www.herouxdevtek.com/aog-product-support. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.govby searching for and locating Docket No. FAA-2017-0395; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office

(telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2017-0395; Directorate Identifier 2017-CE-011-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to http://regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On December 9, 1996, we issued AD 97-10-05, Amendment 39-10017 (62 FR 28318; May 23, 1997) ("AD 97-10-05"). That AD required actions intended to address an unsafe condition on British Aerospace Regional Aircraft Model HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201 airplanes and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2017-0053, dated March 24, 2017 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

> Cracks were found during early fatigue testing and in service on the main landing gear (MLG) main fitting at the pintle to cylinder interface.
>
> This condition, if not detected and corrected, could lead to structural failure of the MLG, possibly resulting in loss of control of the aeroplane during take-off or landing runs.
>
> To address this unsafe condition, BAE Systems (Operations) Ltd published several Service Bulletins (SB) which, in 1996, were consolidated into a single SB 32-JA960142 to provide instructions for inspection. CAA UK issued AD 005-03-96 accordingly to require repetitive inspections of the MLG.
>
> Recently, a crack was found which was below the critical crack length, but unusually large compared to other similar cracks previously found in service. Further investigation into the subject determined that the existing inspection interval remains valid, but also showed that the assumed detectable defect size of 1.27 mm (0.05 in) crack cannot be guaranteed using the current accomplishment instructions for high frequency eddy current (HFEC) or fluorescent dye penetrant (FDP) inspection.
>
> Consequently, BAE Systems (Operations) Ltd issued SB 32-JA960142 Revision 04, which provides improved procedures for HFEC and FDP inspection to ensure the detection of cracks of 1.27 mm (0.05 in).
>
> For the reason described above, the [EASA] AD retains the requirements of CAA UK AD 005-03-96, which is superseded, and requires accomplishment of repetitive inspections in accordance with the improved procedures.

You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0395.

Related Service Information under 1 CFR part 51

We reviewed British Aerospace Jetstream Series 3100 and 3200 Service Bulletin 32-JA960142, Revision No. 4, October 21, 2016, which describes procedures for doing

non-destructive testing for cracks in the MLG and corrective actions if cracks found exceed a certain crack length. (The appendix to the service bulletin specifically describes fluorescent liquid penetrant testing.) We reviewed Heroux Devtek Service Bulletin 32-56, Revision 4, dated August 16, 2016, which describes procedures for doing a non-destructive testing eddy current inspection for cracks in the MLG. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination and Requirements of the Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 26 products of U.S. registry. We also estimate that it would take about 6 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $13,260, or $510 per product.

In addition, we estimate that any necessary follow-on actions would take about 1 work-hour and require parts costing $5,000, for a cost of $5,085 per product. We have no way of determining the number of products that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Amendment 39-10017 (62 FR 28318; May 23, 1997), and adding the following new AD:

British Aerospace Regional Aircraft: Docket No. FAA-2017-0395; Directorate Identifier 2017-CE-011-AD.

(a) **Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) **Affected ADs**

This AD replaces AD 97-10-05; Amendment 39-10017 (62 FR 28318; May 23, 1997) ("AD 97-10-05").

(c) **Applicability**

This AD applies to British Aerospace Regional Aircraft Model HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201 airplanes, all serial numbers, certificated in any category.

(d) **Subject**

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) **Reason**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as

cracks in the main landing gear (MLG) fitting at the pintle to cylinder interface, which could cause failure of the MLG during takeoff and landing. We are issuing this proposed AD to detect and correct cracks in the main landing gear (MLG), which could lead to structural failure of the MLG and could result in loss of control during takeoffs and landings.

(f) **Actions and Compliance**

Unless already done, do the following actions listed in paragraphs (f)(1) through (3) of this AD:

(1) Within the compliance times listed in paragraph (f)(1)(i) or (ii) of this AD, as applicable, inspect the MLG for cracks following Appendix 1 of British Aerospace Jetstream Series 3100 and 3200 Service Bulletin 32-JA960142, Revision No. 4, October 21, 2016; or Heroux Devtek Service Bulletin 32-56, Revision 4, dated August 16, 2016, as specified in British Aerospace Jetstream Series 3100 and 3200 Service Bulletin 32-JA960142, Revision No. 4, October 21, 2016.

(i) For airplanes that have been inspected following AD 97-10-05: Do the initial inspection within 1,200 flight cycles (FC) after the last inspection required by AD 97-10-05 and repetitively thereafter at intervals not to exceed 1,200 FC.

(ii) For airplanes that have not been inspected following AD 97-10-05: Do the initial inspection within 8,000 FC after installation of the MLG or within the next 100 FC after the effective date of this AD, whichever occurs later, and repetitively thereafter at intervals not to exceed 1,200 FC.

(2) If any cracks are found during any of the inspections required in paragraph (f)(1) of this AD, before further flight, replace the MLG with an airworthy part following British Aerospace Jetstream Series 3100 and 3200 Service Bulletin 32-JA960142, Revision No. 4, October 21, 2016.

(3) The compliance times in paragraphs (f)(1)(i) and (ii) of this AD are presented in flight cycles (landings). If the total flight cycles have not been kept, multiply the total number of airplane hours time-in-service (TIS) by 0.75 to calculate the cycles. For the purposes of this AD:

(i) 100 hours TIS X .75 = 75 cycles; and

(ii) 1,000 hours TIS X .75 = 750 cycles.

(g) **Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) *Airworthy Product:* For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) **Related Information**

(1) Refer to MCAI European Aviation Safety Agency (EASA) AD 2017-0053, dated March 24, 2017. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0395.

(2) For the British Aerospace Jetstream Series 3100 and 3200 service information related to this AD, contact BAE Systems (Operations) Ltd, Business Support Team-

Technical Publications, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; phone: +44 1292 675207; fax: +44 1292 675704; email: RApublications@baesystems.com; Internet: https://www.regional-services.com/spares_and_support/support/aircraft-technical-publications/. For the Heroux Devtek service information identified in this proposed AD, contact Heroux Devtek Product Support, Unit 1, Pembroke Court, Chancellor Road, Manor Park, Runcorn, Cheshire, WA7 1TG, England; phone: +44 01928 530530; fax: +44 01928 579454; email: technical_support@herouxdevtek.com; Internet: http://www.herouxdevtek.com/aog-product-support.

(3) You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on April 20, 2017.

Melvin Johnson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

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